A METHOD FOR VISUALIZING LARGE VOLUMES OF MULTIPLE-ATTRIBUTE DATA WITHOUT AGGREGATION USING A PIXEL BAR CHART

ABSTRACT OF THE DISCLOSURE

A method for graphically presenting large volumes of data without aggregation using a pixel bar chart. Records having multiple attributes are sorted for constructing a graphically displayable array, wherein the graphically displayable array comprises a plurality of pixels. Each pixel represents one record. The non-aggregation data visualization technique of the present invention provides solutions to meet the need of automatic data preparation for the visual data mining of massive data volumes. The present invention effectively uses screen space to represent each record without cluttering the display, allowing a user to easily discover patterns and correlations. The present invention provides a visual impression by representing the value of a record by a color and representing the number of records by the area of a group. With "drill down" capability, a user can navigate through each record to find detail information. Each record is represented by one pixel, allowing millions of records to be displayed at the same time. Each individual record can be accessed interactively, by allowing direct access to the detail data by picking at single pixels.